DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 1952

WEDNESDAY, JULY 11, 1951

UNITED STATES SENATE,
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,
Washington, D. C.

The subcommittee met at 10 a. m., pursuant to recess, in room 224, Senate Office Building, Hon. Joseph C. O'Mahoney (chairman of the subcommittee) presiding.

Present: Senators O'Mahoney, Ferguson, and Knowland.

DEPARTMENT OF THE NAVY

BUREAU OF AERONAUTICS

STATEMENTS OF REAR ADM. THOMAS S. COMBS, USN, CHIEF, BUREAU OF AERONAUTICS; CAPT. JOSEPH E. DODSON, USN, FISCAL DIRECTOR, BUREAU OF AERONAUTICS; REAR ADM. HERBERT S. DUCKWORTH, USN, DIRECTOR, AVIATION PLANS AND PROGRAMS, DCNO (AIR); REAR ADM. EDWARD W. CLEXTON, USN, ASSISTANT COMPTROLLER, DIRECTOR OF BUDGET AND REPORTS; CAPT. ROBERT M. REYNOLDS, USN, DIRECTOR, INDUSTRIAL PLANNING DIVISION, BUREAU OF AERONAUTICS; CAPT HENRY F. MacCOMSEY, USN, DIRECTOR, PLANS COORDINATION DIVISION, BUREAU OF AERONAUTICS; CAPT. CHARLES ADAIR, USN, ASSISTANT DIRECTOR OF BUDGET AND REPORTS; JOSEPH E. LEWIS, DEPUTY FISCAL DIRECTOR, BUREAU OF AERONAUTICS; CAPT. BENJAMIN E. MOORE, USN, ACNO (AVIATION PLANS); CAPT. ROBERT R. CRAIGHILL, USN, CHIEF STAFF OFFICER, OFFICE OF BUDGET AND REPORTS; CAPT. CHARLES L. WERTS, USN, STAFF OFFICER, OFFICE OF BUDGET AND REPORTS; BRIG. GEN. CLAYTON C. JEROME, USMC, DIRECTOR, MARINE AVIATION DIVISION, DCNO (AIR); AND CAPT. ALLEN M. SHINN, USN, ACNO (AVIATION PLANS)

MARINE USE OF HELICOPTERS

Senator O'MAHONEY. The subcommittee will come to order, please. We have not quite finished with you, Admiral, have we?

Admiral DUCKWORTH. With your permission, Mr. Chairman, since we have not completely given you a satisfactory picture of helicopters, I have asked General Jerome to be here with us this morning so that

he could give a short talk on the Marine use of helicopters, both as an amphibious weapon and for use in straight ground work.

Senator O'MAHONEY. You may proceed, General.

General JEROME. I am a little cold on the proceedings here. I had not been here before, but I am not cold on helicopters.

Senator O'MAHONEY. That is all that is required, General.

General JEROME. I understand one of the things before the committee was the question of the vulnerability of these helicopters. I am talking now of the observation-type helicopter.

Senator O'MAHONEY. That was discussed at the last session. One of the members of the committee wondered how it was possible for them to stand up against antiaircraft fire and against other aircraft. The explanation that was given was that when a helicopter runs into antiaircraft fire it can retire beyond the range of the guns and from a different angle get satisfactory observations while aircraft of great speeds cannot come down that low to do much damage. That was the explanation as I recall it.

General JEROME. In the early part of World War II, we had a great deal of worry regarding the use of the OY, the liaison standard wing aircraft, as to whether they would be shot down, whether we could operate them over the front lines for observation and liaison purposes. We wondered whether they would be shot down from the air, whether they would be shot down by ground fire. We did lose some. I do not remember a single case where we ever lost a liaison plane, one of these slow planes, from a high-powered fighter coming down and getting it.

To operate we must have air superiority, but I cannot imagine a high-powered jet coming down to get one lone helicopter or one lone observation plane near the ground when the cost of the helicopter is probably one-tenth of that of the jet. It just is not good business.

Senator KNOWLAND. Where you are planning on using helicopters in place of landing barges where they would be loaded with troops, that would not necessarily be the same situation?

General JEROME. I would like to go into that. I was confining my remarks purely to the observation-type plane.

COUNTER-MEASURES AGAINST ENEMY HELICOPTERS

Senator O'MAHONEY. Before you go into that, may I ask you what steps our forces have taken to protect themselves against observation by the helicopter?

General JEROME. They will have to try to knock them down.

Senator O'MAHONEY. With what?

General JEROME. They cannot do anything until we get air superiority, sir. We have got to have air superiority first or the troops are not going to move.

Senator O'MAHONEY. But you have just finished telling us the high-powered planes cannot get a helicopter.

General JEROME. I did not say they cannot.

Senator O'MAHONEY. You knew of no instance where they came down?

General JEROME. That is right. We will have to have plenty of AA right up close.

Senator O'MAHONEY. You are describing the situation in which the helicopter is practically invulnerable on either side. The observation can go on undisturbed, so I put the question on the other shoe: What do they do to prevent observation by an enemy with a helicopter?

General JEROME. We will have to prevent it with 20-millimeter and 49-millimeter fire close to the front-line divisions to knock them down.

Senator O'MAHONEY. But the observation will continue from a position in the rear?

General JEROME. That is right.

Senator O'MAHONEY. So what you are saying to us is the helicopter can get observation on either side without very much interference.

General JEROME. That is pretty nearly true, sir. We must have the observation.

The liaison observation helicopter, the one coming out now, is the one which has practically the same performance speed as the little OY that we are accustomed to. I talked to General Craig just after the Naktong battle. I said, "How did our helicopters make out and how many do you want in your observation squadron?" He said "12." The ground commanders want anywhere from 12 to 24 of them due to their great utility.

VALUE AS RESCUE PLANES

I would like to quote a few figures of the great value of these helicopters from the rescue point of view that we have had in Korea from August 1, 1950, to March 31, 1951, where we tried to maintain 9 helicopters in commission: 4 airmen were rescued at sea; 15 airmen were rescued behind enemy lines; 4 airmen near the front lines and under fire; 11 airmen in friendly territory; 6 nonairmen behind the enemy lines; and critically wounded marines—people who could not walk—those helicopters evacuated 1,033.

Senator KNOWLAND. I do not think any of us raised a question as to the job the helicopters have been doing in the Korean War. I was over there last November. Everywhere they spoke very highly of the job they were doing. The only point we raised has been that up to certainly very recently the Communists had not been using much airpower down over our lines. We have run into their MIG's, but they have been largely up within a relatively short distance of the Yalu River because we have not shot down a single one over our lines.

USE IN LARGE-SCALE WAR

The point that we raise is: What have we done in Korea and what do you plan on doing in using them for taking in assault troops, et cetera? Can you have any such record against a first-rate power which would be using air power against us in the same way we envision in using air power against an enemy, or will these helicopters under those conditions be more in the nature of sitting ducks? That is the question we are trying, in a nonprofessional way, to get the answer to.

General JEROME. Senator, I feel absolutely we can.

Senator FERGUSON. What would you do, in other words, if the enemy were using these helicopters now in Korea?

General JEROME. If the enemy were using helicopters over our lines, we would be busy upstairs fighting off the fighters and it would be up to the AA down below to get them.

Senator FERGUSON. You would not think you would have any trouble getting them down below?

General JEROME. I think we will have plenty of trouble getting them down below.

Senator KNOWLAND. Could you use a slower-type propeller plane as an antihelicopter device rather than a fast jet?

General JEROME. I think we may have to come to it.

Admiral COMBS. That would be the one salvation you might have, because in the ground support we do not need particularly the fast jet aircraft. They do better at high altitudes to clear the air and maintain air supremacy. It is entirely possible, they can take the slower-moving ground support planes and as they come in to hit the strong points of the enemy and happen to see a helicopter down below, they might attack them as they go by. That is entirely possible, sir.

Senator O'MAHONEY. Proceed, General.

ASSAULT HELICOPTERS

General JEROME. The main question seems to be about the so-called assault helicopter. I was trying to figure maybe it is a bad name. Maybe it gives an erroneous impression when you say "assault." We do not figure on the assault helicopter as a fighting weapon. It is simply the vehicle that delivers the assault troops. We do not have assault helicopters in Korea at the present time.

An incident during the last break-through out there, and this was told me by Colonel Cramm—he was flying an OY—when the Chinese came down, the hordes of them came down and they slipped off the left flank of the First Marine Division and the ROK division practically disappeared, they were dropping much napalm on these people in the road, but they kept coming around it. You could not keep enough fire on them. If you had commanding ground where you could have gotten constant machine-gun fire and make them wade through it, it could have been stopped. This division was not endangered except this was coming on their left flank. They took steps to stop them by sending over a strong patrol by truck to try to take that high ground. It was getting near dark. It is very rugged out there. Colonel Cramm saw them and he said, "I do not think they will make it. They can't possibly get over there in time." They did not get over.

By morning the Commies had gone over the hill and those were the ones that practically annihilated that British brigate. Cramm said, "Jerry, if I had 15 helicopters, 10-man helicopters, where I could have gotten fighting marines with their mortars and machine-gun fire on that hill, we could have held and they would have never gotten over the hill." It was impossible to take the ground within time. That is one of the great advantages these helicopters are going to give us, flexibility of shifting from one front to another.

Senator FERGUSON. Here you have had an enemy without any antiaircraft guns with their armies at all.

General JEROME. They have plenty now, sir.

Senator FERGUSON. Then how are you using helicopters?

General JEROME. Over the lines you mean?

Senator FERGUSON. Yes.

General JEROME. When we go in on rescue missions with helicopters, we put the fighters with them.

Senator FERGUSON. How many helicopters have you lost in battle?

General JEROME. I do not know the number exactly. We have not had too many to lose. I would say we probably lost, actually shot down, not over four or five.

SCARCITY OF ENEMY ANTIAIRCRAFT

Senator FERGUSON. Then they must not have much antiaircraft with their army.

General JEROME. The ones we have over there now, sir, are not running over the front lines except on special missions. The mission I just told you where we could have stopped these Commies coming through, there was no AA in there. Nobody would fire at them. We still had control. They were coming down the road.

Senator FERGUSON. What is hard for me to understand is you have got the development for speed, the jet. We are spending billions for it. Then we have got another branch that is doing something on a 120-mile-an-hour plane. That is difficult for me to understand as a layman.

General JEROME. We are going through a stage of development in the helicopter right now.

Senator FERGUSON. This is more than development. You asked for 500 helicopters.

General JEROME. That is the total, Navy, sir. Our requirements are not that many. They are antisubmarine warfare and everything. Ours is a small portion of those helicopter requirements that you are referring to.

HELICOPTERS IN GROUND COMBAT

Senator O'MAHONEY. As a matter of fact, General, you came up here to tell us about the operation of the helicopter in ground combat. Your testimony is, as I summarized it a little before, that the helicopter by withdrawing from the range of the antiaircraft gun can protect itself. It is also practically invulnerable to attack from the fast fighter planes above because they cannot successfully come down low enough to knock them out.

General JEROME. He can come down and operate. He is going to have an awful time.

Senator O'MAHONEY. The chances are against it.

General JEROME. It is not a pay-off target for him to come down and shoot at these.

Senator O'MAHONEY. That is what you said. As far as the committee is concerned, we are interested in all the uses of the helicopter in order that we may get some idea of the requests you are making. In the material submitted to us we have the helicopter, antisubmarine squadrons. Apparently that is a minor factor in the total request you are making.

Admiral COMBS. Yes, sir. The helicopter is part of our seagoing antisubmarine team.

Senator O'MAHONEY. I can understand how the helicopter can be very effective in antisubmarine work. I think probably it might be well for you to describe that a little bit to us.

General Jerome, did you have anything else?

General JEROME. Yes, sir. I had one other thing I would like to say in regard to building up to the use of the assault helicopter. That is, we are charged in the Marine Corps with developing tactics and techniques of amphibious operations, not only for ourselves but for all services.

We have been working on it since 1946. We all think it will work. I am convinced in my own mind it will work, that we can take them in.

Senator FERGUSON. When did they change their minds about helicopters? I know what they thought of them a few years ago.

General JEROME. There was not money to develop them. It was a new thing. It was not picked up. As I started to say a minute ago, Senator, the helicopter of 10 years from now—any similarity between that and the helicopter we have today will be purely coincidental.

The next step we have to go to is the converti-plane which takes off as a helicopter, lands as a helicopter, and in the air it goes forward at high speed. That is what we are building up to. I think it is absolutely possible within the next 10 years. We have got to get started now.

NUMBER AND LOCATION OF ASSAULT CRAFT

Senator KNOWLAND. I can understand this situation in regard to the value on these assault craft. How many of them do you have now? You had some training with them. I have seen some pictures.

General JEROME. We have one squadron that will be ready to be deployed in 1 month.

Senator KNOWLAND. Where are they located?

General JEROME. We are organizing them on the west and the east coasts.

Senator KNOWLAND. What I am interested in, and I think the chairman might be interested in is actually seeing some of these operating. How far away are we?

General JEROME. At Quantico we have a demonstration. The helicopter operations are tied in with the close air support demonstration. We would be most happy to put on a demonstration down there for you.

Senator FERGUSON. The trouble with some of these orientation courses is you do not invite the Congress. You invite the businessmen. I realize they pay the taxes, but we have to be the operating force to put the tax money in the bank.

General JEROME. The Marine Corps does not do any of the inviting sir. It is done by the Department of Defense. We are on a lower level than that.

Senator O'MAHONEY. We can get an invitation.

General JEROME. I know that you can. I wish you could see it. It is very effective. I think it would take some of the questions out of your mind.

Senator KNOWLAND. I think it is important to this subcommittee because we are going to have some questions come up. I would like to have a chance to see what they can do.

Senator O'MAHONEY. It is always interesting in a session of this kind to hear the story of the operation and it is always a little bit boring to get down to the actual facts about the money that goes into this business. So I want to bring the committee and the witnesses back to the money end of it for a moment.

I would like to ask the members of the committee to look at appendix A of Admiral Duckworth's presentation and page 373 of the 1952 confidential estimate, book No. 3.

FUNDS FOR COMBAT UNITS

In appendix A there is a list of the fleet combatant units for fiscal 1952 as compared with the second supplemental in 1951. This is under the heading "planned aircraft allowances for naval aviation activities."

I assume that takes in the entire request. The helicopters there you will observe call for 72 aircraft; whereas, on page 373 they are noted as 99 aircraft. Inasmuch as these cost $486,650 apiece, the total bill for 99 amounts to $48,178,000. There is an apparent discrepancy between 72 and 99.

Admiral DUCKWORTH. Captain Shinn can give you the details.

Captain SHINN. The figures on Admiral Duckworth's statement that you are looking at are the operating requirement. There are a certain number of aircraft required in what is called logistic support, for pools, pipelines, damaged airplanes going through repair, and for overhaul. The normal percentage is about 30 to 35 percent. It varies among models. That explains the difference between 72 operating helicopters required and 99 which we must have in the inventory in order to support those 72 operating.

Senator O'MAHONEY. I was misled a bit by the planned aircraft allowances. You have the reserve in addition to those which are to be allotted to the four squadrons.

Captain SHINN. They are shown in the next to the last line on that page of appendix A, Logistic Support, aircraft—2,861.

Senator O'MAHONEY. That list includes everything?

Captain SHINN. That includes that difference in heilcopters.

Senator O'MAHONEY. You have a very large total active inventory there. Does that include the total number of new aircraft requested in 1952, or is it exclusive of that?

TOTAL ACTIVE INVENTORY

Captain SHINN. That includes all aircraft that will be procurred from 1952 money. They will be in the active inventory.

Senator O'MAHONEY. In other words, the total active inventory as shown here represents the total number you will have if the full allowance is made for 1952?

Captain SHINN. No, sir. As mentioned Monday, we will have some aircraft in excess. The total inventory will be above the required number.

Senator O'MAHONEY. It is total active inventory and then something else beside. Now what is that?

Captain SHINN. At the end of the fiscal year 1952, that is, on the 30th of June, if our program goes along as presently planned, we would have this total aircraft of all kinds on hand in the Navy, including many World War II models that we are still keeping. In other words, our excess would be 2,792 aircraft.

Senator O'MAHONEY. Is there any possibility anywhere on the list of aircraft scheduled on page 373 that any cuts can be made?

Captain SHINN. Senator, this list has been reviewed through all of the service, Defense Department, and Budget Bureau authorities, as you know. As was pointed out the other day, we have to balance our economy, military against civilian needs. This list has been affirmed at every stage as absolutely required. It is not the complete requirement to modernize our authorized forces by the end of 1952, by any means, as you will see further in appendix B. We will still have a deficiency of over 1,200 aircraft, even though we do buy this complete list on page 373.

Senator O'MAHONEY. Where does that appear?

Captain SHINN. That is appendix B; I am sorry, it is on the second page. It shows our first-line combat requirements, losses through attrition and due to obsolescence, throughout the delivery period of the aircraft that are discussed in this budget.

Senator O'MAHONEY. Where does the deficiency show up?

Captain SHINN. The last line on the second page of appendix B. On December 31, 1953, we will have a deficiency of 1,203 aircraft.

RETIREMENT DATE OF AIRPLANES

Senator FERGUSON. What is the life that you allow for retirement of an airplane?

Captain SHINN. It varies among models. I will have to get exact figures.

Senator FERGUSON. Of the three force services, have they agreed on a time? We had difficulty getting them to arrive at about the same period.

Captain SHINN. We are on about the same time period, sir. Our philosophy of determining first-line life is absolutely different from that of the Air Force. They take an exact calendar period for each plane. We take an entire model, and it is determined by a board of officers at what time that model can no longer be considered useful for unlimited combat. Our averages over a period of years have been substantially the same as those of the Air Force.

Senator FERGUSON. I wonder whether they can furnish us with this information here about the amount that will be retired, or is that secret? I mean to put it in the record later.

Captain SHINN. I could not give you the complete list now, but I can give you most of the important ones. We have just recomputed this within the last 2 weeks. In the fighters, from 2½ to 3 years. In the attack planes, 3 years average; the patrol, 3½ to 5 years. We do not count the transport and trainers, as the Air Force does, in a first-line category. We simply use those until they wear out due to use. We do not retire them specifically on an obsolescence basis.

Admiral DUCKWORTH. Senator, on page 3 of this appendix B is a list of models of planes and numbers which will go out of first-line use.

Senator FERGUSON. I noticed the list, but I wanted the time element.

Admiral DUCKWORTH. The F9F–2 and 3 and the F2H about one-third of the way down, they go second-line in fiscal 1952. From the diagram comparison of the MIG–15 and the F9F–2 and the F2H which you saw yesterday you can see why we make it second-line. Actually these two planes should have gone second-line the day the MIG appeared over Korea. We adhered to our previous figures and kept it first-line until the fiscal year 1952. It has been out-performed by the Russian fighter on the front line. That is actually the final test in whether or not an airplane is first-line.

NEWS ON PLANE LOSSES

Senator FERGUSON. I have never heard an announcement on the radio where an American plane was ever damaged or shot down. It is only the enemy planes that are shot down and damaged. I have been listening for days on that. I realize that certain information should not get out, but I am wondering whether the public generally when you say the Russian plane is not as good as our planes, really knows what the situation is, and how do you account for this news coming out over the radio?

Senator KNOWLAND. It was published not long ago in an Air Force release—I forget the exact figures—where we lost 200 planes compared with 300 of the Communists' which struck me we were losing a pretty high percentage of planes.

Senator FERGUSON. Senator, the reason I mentioned this radio news is because I listen to that in the morning and it never gives any of our losses, but then we get it in a lump sum.

Admiral DUCKWORTH. That is correct.

Senator FERGUSON. It struck me the public would soon catch up and wonder whether we were perfect, that we just have everything that we need. We do the shooting down and we never lose a plane.

Senator O'MAHONEY. The broadcasters do not get all the news.

Senator FERGUSON. That is the reason I was anxious to get the figures.

TOTAL SUM REQUESTED

Senator O'MAHONEY. Getting back to money again, the total sum that you are requesting for naval aircraft, including the marines, is almost $3 billion—$2,983,412,000. You tell us that you know of no place where that can be cut.

Admiral COMBS. We feel we need them, sir.

Senator O'MAHONEY. There is some difficulty in interpretation here because of the definitions that you use. Here is the total active inventory on page 1 of appendix A. Then the total first-line inventory requirements. That is on page 1 of appendix B. Obviously those two are different. There is a different significance. The first line I suppose is the difference between the two. What is the first-line requirement?

FIRST-LINE PLANES

Admiral DUCKWORTH. A first-line airplane is one with which we would directly oppose the enemy. That is the one you actually fight with. That one is the best you can produce to oppose the enemy.

Senator FERGUSON. That is his plane or his forces? Oppose the enemy, the enemy's plane?

Admiral DUCKWORTH. A plane of comparable quality.

Senator FERGUSON. You are talking about opposing the enemy's planes or the enemy's forces first line?

Senator O'MAHONEY. I take it you mean against the enemy forces completely?

Admiral DUCKWORTH. I suppose "forces" is the proper broad term.

Senator O'MAHONEY. Then again you have United States Navy, total first-line operating. To get the total first-line operating one has to add the reserve. That is quite understandable. But the total first-line inventory requirement is much greater because it includes logistic support. What is the difference between reserve and logistic support?

Admiral DUCKWORTH. The Naval Reserve?

Senator O'MAHONEY. Look on appendix B.

DISTINCTION BETWEEN TYPES OF PLANES

Captain SHINN. The difference there is that under Naval Reserve we have aircraft actually operating for the training of United States Naval and Marine Corps reservists. Those are operating aircraft. Their allowance is 2,001 operating aircraft. The logistic support of 2,861, the next line to the bottom, are the planes required to keep our combat, our reserve, our indirect and direct fleet support aircraft up to operating strength.

Senator O'MAHONEY. Are there any other questions? Does this complete the presentation on behalf of naval aircraft?

Admiral COMBS. I have the Bureau of Aeronautics presentation, I have not started yet, sir.

Senator O'MAHONEY. Captain Reynolds was making a presentation yesterday which was not completed.

Admiral COMBS. I will include the completion of that when I come to it in my statement.

Admiral DUCKWORTH. If the committee has no further questions regarding helicopters, I would like to ask that General Jerome be excused.

Senator O'MAHONEY. Thank you, General, for appearing.

General JEROME. Thank you, sir. It is a pleasure to appear before you.

NAVAL AVIATION ESTIMATES

Admiral COMBS. Mr. Chairman and gentlemen: It is a great privilege to come before you as a representative of our fighting forces, to present the requirements of naval aviation for fiscal year 1952, and to explain the factors affecting our budget estimates. Essentially our estimates are based on the planned aircraft operating strength and

the number of new aircraft which must be procured to maintain that strength in a state of effective military readiness. All of the other factors affecting program requirements stem from these two major factors and necessarily must be in balance with them. For that reason your decision as to the size of these two major factors will in large measure establish the amounts that are necessary under the aviation appropriations of the Navy.

These estimates are based on the operating levels of aircraft for the Regular Navy and Marine Corps. This level of operating strength has been approved by the Joint Chiefs of Staff and is considered to be in phase with all other force levels approved for the Navy. It represents essentially a balancing of our operating aircraft with the combat force levels currently authorized and in process of implementation.

In pricing these program factors, we have in each area of our estimates limited the unit costs employed to those actually prevailing at the time our estimates were prepared last January. All of our operational programs are predicated on peacetime rates and wherever possible we have planned on deferring procurement to a later fiscal year. We believe, therefore, that estimates we are presenting are conservative in relation to the planned program of national defense and that they reflect the great effort we continuously are making to provide a greater measure of defense with only modest increases in appropriations.

Our estimates of the appropriations required during the current year to meet the planned 1952 program for naval aviation in accordance with Joint Chiefs of Staff directives total $4,497,869,000. These estimates break down by appropriations as follows:

(The estimates referred to are as follows:)

[In thousands of dollars]

	Provided for fiscal year 1951	Required for fiscal year 1952	Change
"Aircraft and facilities, Navy"	932,388	925,393	−6,995
"Construction of aircraft and related procurement, Navy"	3,050,922	3,572,476	+521,554
Total, both appropriations	3,982,310	4,497,869	+514,559

OPERATION, MAINTENANCE, AND CONSTRUCTION OF AIRCRAFT

Admiral Combs. The "Aircraft and facilities" appropriation provides for our operating and maintenance programs, including research and development, and the "Construction of aircraft" appropriation finances the procurement principally of aircraft and missiles but includes also provision for expanding the aviation productive capacity to meet the volume of output which would be required during the early stages of extensive hostilities. Each of the program areas, or budget activities, included under these two appropriations will be covered separately in the remainder of this statement and summaries of the amounts required by budget activity are presented for your convenience in appendixes A and B to this statement.

(The information referred to is as follows:)

AIRCRAFT AND FACILITIES, NAVY

Analysis of fiscal year 1952 requirements by budget activity

Budget activity	Provided for fiscal year 1951	Required for fiscal year 1952	Change from fiscal year 1951
1. Flight operations, Regular Navy	$116,977,000	$117,834,000	+$857,000
2. Flight operations, Naval Reserve	15,550,000	14,181,000	−1,369,000
3. Aircraft overhaul, Regular Navy	218,568,000	247,483,000	+28,915,000
4. Aircraft overhaul, Naval Reserve	49,005,000	34,185,000	−14,820,000
5. Station operations, Regular Navy	140,652,679	155,069,000	+14,416,321
6. Station operations, Naval Reserve	10,312,000	9,800,000	−512,000
7. Alteration and replacement of facilities	84,098,000	60,650,000	−23,448,000
8. Research and development	130,262,000	159,729,000	+29,467,000
9. Industrial mobilization	29,354,000	6,221,000	−23,133,000
10. Supporting equipment, matériel, and services	132,304,000	114,350,000	−17,954,000
11. Departmental administration	5,305,000	5,891,000	+586,000
Total, all budget activities	932,387,679	925,393,000	−6,994,679

CONSTRUCTION OF AIRCRAFT AND RELATED PROCUREMENT, NAVY

Analysis of fiscal year 1952 requirements by budget activity

	Provided for fiscal year 1951	Required for fiscal year 1952	Change from fiscal year 1951
1. Aircraft procurement	$2,779,434,000	$3,449,854,000	+$670,420,000
2. Ordnance for new aircraft	57,741,000	49,056,000	−8,685,000
3. Guided missile and target drone procurement	101,261,000	33,425,000	−67,836,000
4. Technical equipment for service training	4,735,000	10,938,000	+6,203,000
5. Aircraft modernization	107,751,000	29,203,000	−78,548,000
Total, all budget activities	3,050,922,000	3,572,476,000	+521,554,000

FLIGHT OPERATIONS, REGULAR AND RESERVE PROGRAMS

Admiral COMBS. Flight operations: 1952 programs, Regular Navy, $117,834,000; Naval Reserve, $14,181,000—1951 programs: Regular Navy, $116,977,000; Naval Reserve, $15,551,000. Changes, Regular Navy, +$857,000; Naval Reserve, −$1,369,000.

Late in fiscal year 1951, 2 new carrier air groups and 16 other combat squadrons were added to the Regular Navy and Marine Air Forces by ordering Reserve units into the active military service. These and earlier reactivations have emphasized the vital importance of the Naval Air Reserve program to defense planning. The Reserve pilots who returned to active duty in this period currently are being given intensive flight training at our Reserve air stations and are scheduled to join fleet units as soon as this refresher training is completed and the necessary additional aircraft are provided. Because of a temporary shortage of Regular Navy aircraft, the refresher training has been conducted at Naval Air Reserve stations with Naval Reserve aircraft.

IMPORTANCE OF NAVAL AIR RESERVE

Senator O'MAHONEY. You regard the Naval Air Reserve as of vital importance?

Admiral COMBS. Yes, sir.

Senator O'MAHONEY. It has demonstrated its efficiency in your judgment?

Admiral COMBS. It definitely has, sir.

Senator O'MAHONEY. It is an expensive operation.

Admiral COMBS. It is an expensive operation, but it is an essential part of our forces and has demonstrated its efficiency both in World War II and in this Korean conflict.

Senator FERGUSON. What percentage are you using in Korea?

Admiral DUCKWORTH. Of the forces we have on active duty approximately one-third have been recalled to active duty from the Naval Reserve within the last year. About all expansion that has taken place in naval aviation in the past year has been the direct result of Naval Reserve units called to active duty.

Senator O'MAHONEY. What is the expected active life of a Reserve pilot after call-back, his serviceable life as a pilot?

Admiral DUCKWORTH. That would depend on the individual, but these Reserves we have today are 6 years older than they were in World War II.

Senator O'MAHONEY. Yes. At what age do you refuse to call a Reserve pilot back into service?

Admiral DUCKWORTH. We have not definitely set an age limit. So far we have tried to call back as young a pilot as we can get every time. Our past rules have been that a Reserve pilot can remain in a Reserve fighter squadron until he is 32 or 33 years old. That means that he either then has to go into a transport squadron or something like that and continue for another 5 or 6 years in the Reserve organization. Eventually your World War II reserves are all going to be lost due to age.

AGE OF PILOT RETIREMENT

Senator FERGUSON. There must be a time when you put them out of the Reserve. It does not pay to keep training them, does it?

Admiral DUCKWORTH. That is correct

Senator FERGUSON. What is that age?

Admiral DUCKWORTH. Thirty-two for a fighter pilot. The exact age on the other types I am not sure, but it runs up to approximately 40.

Senator O'MAHONEY. Do these Reserve pilots go into commercial aviation?

Admiral DUCKWORTH. No, sir; generally into other business.

Senator O'MAHONEY. They might get completely out of training then? When a Reserve pilot goes into another business other than aviation, when he abandons aviation as his daily life, then he begins to lose efficiency?

Admiral DUCKWORTH. On a day-by-day efficiency basis, yes. But by flying 1 week end a month throughout the year, then 2 weeks of active duty per year, which we have our organized program for, we have been able to maintain a satisfactory state of proficiency, not that the pilot is a finished combat pilot, but he is a safe pilot to operate the combat airplanes we give him. By maintaining that state of proficiency, he is then ready when we call so that by an intensive period of 1 or 2 months' training he can regain his old wartime efficiency.

Senator O'MAHONEY. Have you any statistics as to how many of these losses of airplanes which you reported are due to the human element, the failure of the pilot?

Admiral DUCKWORTH. I do not think anybody has taken out of the Korean losses those figures. Our over-all plane accident rate will show a relatively high percentage of pilot error.

Senator O'MAHONEY. I was very satisfied and encouraged to hear the testimony of Captain Reynolds yesterday, where one of the witnesses, that our superiority in Korea over the MIG is largely the superiority of our operational pilots.

Admiral DUCKWORTH. That is correct.

Senator O'MAHONEY. You think you are taking every precaution to make sure it pays for the expense of maintaining the Reserve?

Admiral COMBS. Yes, sir; we do.

Admiral DUCKWORTH. I do not think our Reserve accident rate is appreciably higher than the over-all accident rate.

ACTIVATION OF MAJOR COMBAT UNITS

Admiral COMBS. During 1952 we are completing the activation of these major combatant units and are bringing the combat support units into appropriate balance at the operating level authorized in accordance with the program summarized in appendix C to this statement. To accomplish these ends, we are increasing the number of operating aircraft for the Regular Navy and Marine Corps from the number estimated to be in operation on the 1st of July of this year to the total operating aircraft strength programed for fiscal year 1952 by the Joint Chiefs of Staff. These additional aircraft will be utilized in the mobilized Reserve squadrons and in the three additional helicopter squadrons and related support units being activated during the current year. This increase in operating strength is accompanied by a proportional increase in aircraft hours but the rates of utilization are programed for 1952 at peacetime levels throughout the Naval Aeronautical Establishment.

REBUILDING OF RESERVE UNITS

Admiral COMBS. In the Naval Air Reserve we are proceeding to rebuild the Naval and Marine Air Reserve units which will be needed during the early stages of possible future hostilities. We are not increasing the number of Reserve operating aircraft from the current level but we are reorganizing and rebuilding Reserve units to provide experienced pilots numbering 6,937 in the Organized Reserve and 2,500 in the Volunteer Reserve. The extent to which we shall be able to meet this 1952 planning objective is somewhat uncertain and we accordingly have predicated the 1952 estimate for the Naval Air Reserve upon an end complement of only 6,100 Organized and 2,155 Volunteer Reserve pilots.

PROGRAM SCALED TO PRESENT COSTS

Admiral COMBS. The specific programs planned for 1952 have been priced for the Regular Navy and Naval Reserve, by class of aircraft, at the actual cost prevailing today. The over-all request for 1952

to support a 23 percent larger Regular Navy flight-hour program is approximately the same as for 1951. This has been accomplished by a tentative lowering of stock levels of aeronautical spares and spare parts. For this same reason the Naval Reserve flight-hour program, which is approximately the same size in both years, will cost 9 percent less in 1952 than in 1953 but as soon as the Naval Reserve is restored to effective level flight-hour requirement the funds to support them will increase correspondingly.

AIRCRAFT OVERHAUL PROGRAM

1952 programs, Regular Navy, $247,483,000; Naval Reserve, $34,185,000. 1951 programs, Regular Navy, $218,568,000; Naval Reserve, $49,005,000. Changes, Regular Navy, +$28,915,000; Naval Reserve, −$14,820,000.

The aircraft overhaul program generally is related directly to the number of aircraft which have been programed for the operation and to the specific rates at which these aircraft will be flying. Aircraft and engine overhaul workload is determined on a detailed model basis and encompasses various related factors reflecting experience reported by operating commands. The number of Regular Navy aircraft and engine overhauls required in 1952 generally parallels the authorized increase in operating strength and levels of flying for the Regular Navy forces.

Actual aircraft and engine overhaul costs reported by the naval industrial activities engaged in this work have been utilized in the development of this estimate, but the total cost reflects the employment of increasing number of jet-powered and more complex aircraft. Funds budgeted for Regular Navy recurring workload in 1952 are somewhat lower than in 1951 but the total estimate includes a nonrecurring item for $44 million to overhaul a number of combat aircraft to be held in reserve for logistic support in event of hostilities. This item represents a deficiency carried over from 1951 when our ready reserve of combat aircraft was completely depleted in order to make aircraft available for Korean combat.

Normally we plan on replenishing military readiness reserves in the year in which a diversion is made but the heavy activation workload required in 1951 precluded accomplishment of a replacement program at that time. We thus have included in the 1952 estimates provision for overhauling these combat aircraft which are being held for logistic support in event of hostilities. I know of no better peacetime insurance than a logistic reserve of serviceable aircraft maintained in a war-ready status. The great military value of such a reserve was clearly proved last June when hostilities suddenly broke out in the Far East.

TOTAL COST OF OVERHAUL PROGRAMS

The total cost of the Naval Reserve overhaul program was computed in the same manner as for the Regular Navy and is 30 percent less in 1952 than in 1951, resulting from a somewhat lower flight-hour program in 1952, the completion in 1951 of a nonrecurring aircraft modification program, and a general lowering of inventory levels.

Senator O'MAHONEY. How do you figure this $44,000,000 to over-

haul combat aircraft? What are the factors that go into that computation?

Admiral COMBS. It is the detailed man-hours and materials required to take a plane apart, take the engine out, take out its components, inspect and overhaul and replace or repair such parts as need replacement as the result of inspection, and put the plane back together.

Senator O'MAHONEY. Is that an estimate based upon bids from aircraft companies or is it based upon your own experience?

Admiral COMBS. No, sir. It is based upon our own experience in our own overhaul shops. That is to be done by the Navy in its own overhaul shops, not by contract, except in one type, our transport planes. Under certain circumstances, we have transport aircraft overhauled by commercial companies.

Senator O'MAHONEY. Do you find your own shops and equipment the most efficient way of doing this job?

Admiral COMBS. They are and most economical; yes, sir.

Senator O'MAHONEY. Upon what do you base that conclusion?

Admiral COMBS. One very important factor is the cost of labor. We use a few of our military personnel in these plants to provide the training they need before they go back to the fleet. The majority of the personnel in these shops are civilians. They get a regular rate, of course. But we watch our costs very closely.

NEED FOR UNIFORMED PERSONNEL

Senator O'MAHONEY. In the first place, it is essential to have mechanics in uniform, is it not?

Admiral COMBS. Yes, sir.

Senator O'MAHONEY. You cannot have an aviation arm of the Navy without mechanics who are capable of doing a high-class job?

Admiral COMBS. That is right.

Senator O'MAHONEY. Do you find them usable and efficient in this overhaul job?

Admiral COMBS. We have as I will explain later in my presentation a very large training program to do just that with our service personnel to train them to become expert mechanics and electronics men.

Senator FERGUSON. In land installation why do you need men in military uniforms for this work?

Admiral COMBS. For the training they require, for the training that the Navy requires of them before they go back to their jobs at sea.

Senator FERGUSON. At sea I realize you need the discipline, but I am thinking about many of the land installations.

Admiral COMBS. Our normal Navy procedure is that a man will spend so much of his enlistment at sea and also have short periods of shore duty. Many are assigned to our overhaul shops while on shore duty in order to keep them in training to be more efficient when they get back to sea.

STATION OPERATIONS

1952 programs, Regular Navy, $155,069,000; Naval Reserve, $9,800,000. 1951 programs, Regular Navy, $140,652,679; Naval Reserve, $10,312,000. Changes Regular Navy, +$14,416,321; Naval Reserve, −$512,000.

Numerically we have held our aviation bases to the minimum needed to support the total authorized operating program and we are keeping active only those bases that we shall need to support fiscal year 1952 forces. During 1952 we are planning to activate two new stations to increase our support capabilities. One of these new stations is programmed for additional fleet units and the other is a newly completed turbine test station which will be engaged in the test and evaluation of new jet aircraft engines.

Senator O'MAHONEY. Do you mean that you have stations which are not active?

Admiral COMBS. Yes, sir. We have many of them that are in a maintenance status or that we have completely disestablished.

Senator O'MAHONEY. How many?

Captain MOORE. The over-all number I do not recall offhand. In a survey of the use of bases with the Air Force last January in the Department of Defense the two services were directed to see whether they could use the other bases, and we made 93 bases available to the Air Force they could take if they wanted.

LIST OF NAVAL SHORE STATIONS

Senator O'MAHONEY. In order to amplify the statement of the Admiral, "We are keeping only those bases we shall need to support fiscal 1952 forces," and the statement that "During 1952 we are planning to activate two new stations," I think it would be well to insert at this point in the record the complete list of all naval stations, active and inactive.

(The information referred to is as follows:)

THE AERONAUTICAL SHORE ESTABLISHMENT

LIST OF ACTIVE STATIONS, 1952

Continental stations

1. NAS, Alameda, Calif.
2. NAS, Atlantic City, N. J.
3. NAF, Brunswick, Maine
4. MCAF, Camp Lejeune, N. C.
5. NAAS, Cecil Field, Fla.
6. MCAS, Cherry Point, N. C.
7. NAAS, Chincoteague, Va.
8. NAAS, El Centro, Calif.
9. MCAS, El Toro, Calif.
10. NAF, Glynco, Ga.
11. NAS, Jacksonville, Fla.
12. NAS, Key West, Fla.
13. NAS, Lakehurst, N. J.
14. NAAS, Miramar, Calif.
15. NAS, Moffett Field, Calif.
16. NAS, Norfolk, Va.
17. NAAS, Oceana, Va.
18. NAS, Quonset Point, R. I.
19. NAS, San Diego, Calif.
20. NAAS, Sanford, Fla.
21. MCAF, Santa Ana, Calif.
22. NAS, Seattle, Wash.
23. NAF, Weeksville, N. C.

Continental stations

24. NAS, Whidbey Island, Wash.
25. NAAS, Cabaniss Field, Tex.
26. NAS, Corpus Christi, Tex.
27. NAAS, Corry Field, Fla.
28. NAAS, Kingsville, Tex.
29. NAS, Memphis, Tenn.
30. NAS, Pensacola, Fla.
31. NAAS, Saufley Field, Fla.
32. NAAS, Whiting Field, Fla.
33. NADC, Johnsville, Pa.
34. NARTS, Lake Denmark, N. J.
35. NATC, Patuxent River, Md.
36. NAMC, Philadelphia, Pa.
37. NAMTC, Point Mugu, Calif.
38. NATTS, Trenton, N. J.
    David Taylor Model Basin, Md. (Bureau of Ships Management and Control)
39. NAS, Anacostia, D. C.
40. NAF, Annapolis, Md.
41. NAF, Litchfield Park, Ariz.
42. NAAS, Monterey, Calif.
43. MCAS, Quantico, Va.

THE AERONAUTICAL SHORE ESTABLISHMENT—Continued

LIST OF ACTIVE STATIONS, 1952—continued

Extracontinental stations

44. NAS, Agana, Guam
45. NS, Argentia, Newfoundland
46. Far East Area air station; name and location classified.
47. NAS, Barber's Point, T. H.
48. NS, Coco Solo, C. Z.
49. NAS, Guantanamo Bay, Cuba
50. NS, Kodiak, Alaska
51. NAS, Kwajalein, Midway Islands
52. NS, Midway
53. NAF, Naha, Okinawa
54. NAS, Pearl Harbor, T. H.
55. Atlantic Ocean Area Air Facility; name and location classified
56. NS, Sangley Point, Philippine Islands
57. NS, Trinidad, British West Indies
58. NAF, Yokosuka, Japan

Naval Air Reserve stations—continental

59. NAS, Akron, Ohio
60. NAS, Atlanta, Ga.
61. NAS, Birmingham, Ala.
62. NAS, Columbus, Ohio
63. NAS, Dallas, Tex.
64. NAS, Denver, Colo.
65. NAS, Glenview, Ill.
66. NAS, Grosse Ile, Mich.
67. NAS, Lincoln, Nebr.
68. NAS, Los Alamitos, Calif.
69. NAS, Miami, Fla.
70. NAS, Minneapolis, Minn.
71. NAS, New Orleans, La.
72. NAS, New York, N. Y.
73. NAS, Niagara Falls, N. Y
74. NAS, Oakland, Calif.
75. NAS, Olathe, Kans.
76. NAS, St. Louis, Mo.
77. NAS, Spokane, Wash.
78. NAS, Squantum, Mass.
79. NAS, Willow Grove, Pa.

Total active stations, 79.

LIST OF INACTIVE STATIONS

Continental stations

1. NAAS, Arcata, Calif.
2. NAAS, Arlington, Wash.
3. NAS, Astoria, Oreg.
4. MCAAS, Atlantic, N. C.
5. NAAS, Barin Field, Fla.
6. MCAAS, Bogue, N. C.
7. NAAS, Bronson Field, Fla.
8. NAAS, Brown Field, Calif.
9. NAS, Bunker Hill, Ind.
10. NAAF, Casco Bay, Maine.
11. NAAS, Charlestown, R. I.
12. NAAS, Chase Field, Tex.
13. MCAAF, Congaree, S. C.
14. NAAS, Creeds, Va.
15. NAAS, Crows Landing, Calif.
16. NAAS, Cuddihy Field, Tex.
17. MCAS, Eagle Mt. Lake, Tex.
18. MCAS, Edenton, N. C.
19. NAAS, Elizabeth City, N. C.
20. NAAS, Ellyson Field, Fla.
21. NAAF, Eureka, Calif.
22. NAAS, Fallon, Nev.
23. NAAS, Fentress, Va.
24. NAS, Fort Lauderdale, Fla.
25. MCAAF, Gillespie, Calif.
26. NAAS, Harvey Point, N. C.
27. NAF, Hitchcock, Tex.
28. NAS, Houma, La.
29. NAS, Hutchinson, Kans.
30. NAS, Lake City, Fla.
31. NAAF, Martha's Vineyard, Mass.
32. NAAS, Mayport, Fla.
33. MCAS, Mojave, Calif.

Continental stations

34. NAS, Norman, Okla.
35. MCAAS, Oak Grove, N. C.
36. NAS, Ottumwa, Iowa.
37. MCAS, Parris Island, S. C.
38. NAAS, Pungo, Va.
39. NAS, Pasco, Wash.
40. NAAS, Quillayute, Wash.
41. NAAS, Ream Field, Calif.
42. NAS, Richmond, Fla. (LTA).
43. NAAS, Rodd Field, Tex.
44. NAAS, San Clemente, Calif.
45. NAAS, San Nicolas Island, Calif.
46. NAAS, Santa Rosa, Calif.
47. NAAS, Shelton, Wash.
48. NAF So. Weymouth, Mass. (LTA).
49. NAF Thermal, Calif.
50. NAS, Tillamook, Oreg.
51. NAAF, Treasure Island, Calif.
52. NAAS, Twenty-Nine Palms, Calif.
53. NAAS, Vernalis, Calif.
54. NAAS, Waldron Field, Tex.

Extra continental stations

55. NAF, Antigua, British West Indies
56. NAAF, Atka, Alaska
57. NAF, Attu, Alaska
58. NAF, Canton Island, Phoenix Island
59. NAAF, Cold Bay, Alaska
60. NAF, Dutch Harbor, Alaska
61. NAF, Ebeye, Midway Islands
62. NAB, Eniwetok Island, Midway Islands
63. MCAS, Ewa, T. H.

THE AERONAUTICAL SHORE ESTABLISHMENT—Continued

LIST OF INACTIVE STATIONS—continued

Extracontinental stations

64. NAF, French Frigate Shoals, T. H.
65. NAS, Hilo, Hawaii, T. H.
66. NAF, Honolulu, T. H.
67. NAS, Kahului, Maui, T. H.
68. NAS, Kaneohe Bay, T. H.
69. NAAF, Kiska, Alaska
70. NAS, Kobler Field, Saipan
71. NAF, Majuro Atoll, Midway Islands
72. North Atlantic area air facility—name and location classified
73. NAS, Orote, Guam
74. NAF, Palmyra Island, T. H.
75. NAAF, Port Althrop, Alaska
76. NAAF, Port Armstrong
77. NAB, Puerta Princessa, Palawan, Philippine Islands
78. NAS, Puunene, Maui, T. H.

Extracontinental stations

79. NAB, Samar, Philippine Islands
80. NAF, Samoa
81. NAAF, Sheyma, Alaska
82. MCAS, St. Thomas, Virgin Islands
83. NAS, Tanapag, Saipan, Midway Islands
84. NAF, Tinian, Marianas
85. NAF, Truk, Carolina Islands
86. NAF, Upola Point, T. H.
87. NAB, Wake Island, Midway Islands
88. NAAF, Yakutat, Alaska
89. NAS, Yonabaru, Okinawa
90. NavAerologSta, Attu, Alaska
91. NavAerologSta, Ulithi, Ulithi Island

Total inactive stations, 91

TOTAL NAVAL SHORE STATIONS

Admiral COMBS. With these two additional stations, we will have in operation in 1952, 58 Regular Navy and Marine Corps stations, whose missions are predominantly air, and 21 Naval Air Reserve stations, plus additional satellite fields and facilities.

OPERATIONAL FACILITIES INADEQUATE

Our most pressing problems in the aeronautical shore establishment stem from the inadequacies of our operational facilities. In order to keep pace with the increased performance of modern aircraft and to keep abreast of aeronautical science, considerable improvement in our operating facilities, both carrier and ashore, is required. Unfortunately the development of station facilities has not paralleled the development of high-performance jet aircraft and, as a result, we are forced to operate high-performance aircraft from facilities designed for much slower and much smaller planes. These basic inadequacies in structure were further aggravated during the postwar period by lack of sufficient funds to keep the facilities in reasonably good repair. Provision was made in the 1951 appropriations for the financing of many of these accumulated repair projects but an extensive new construction program will have to be completed before our shore establishment will be capable of handling high-performance aircraft without undue hazard. Such major improvements, however, must be budgeted under public works and therefore are not reflected in the estimates being presented at this time.

Senator O'MAHONEY. When will those estimates be presented?

Admiral DUCKWORTH. When the public works bill comes to the Senate.

Senator O'MAHONEY. You are referring to the new authorizations?

Admiral DUCKWORTH. Yes, sir.

Admiral COMBS. They are in the House now, I believe.

EXPANDED SHORE ESTABLISHMENT

The 1952 estimate before you provides for support of the expanded shore establishment, both Regular Navy and Naval Reserve, in a state of repair adequate for reasonably safe flight operations. Funds have been included for a full year's operation of the 10 additional stations activated in 1951 and, on a phased basis, for the two new stations programed for 1952. No increase has been budgeted for price rises or for improved standards of operation at stations previously in the program.

A summary of station operations cost for the 1951 and 1952 programs is presented in the following table.

(The table referred to is as follows:)

Station category	1951 programs		1952 programs	
	Number	Amount	Number	Amount
Regular Navy stations:				
Fleet support stations	23	$69,075,000	24	$73,550,000
Training stations	8	20,920,000	8	22,420,000
Research and development stations	5	25,455,000	6	31,000,000
Miscellaneous facilities	5	5,134,000	5	5,190,000
Extra-continental stations	15	20,068,679	15	22,909,000
Total, Regular Navy stations	56	140,652,679	58	155,069,000
Naval Air Reserve stations	21	10,312,000	21	9,800,000
Total, all stations	77	150,964,679	79	164,869,000

Alteration and replacement of facilities:	
1952 programs	$60,650,000
1951 programs	84,098,000
Decrease	23,448,000

ALTERATION AND REPLACEMENT OF FACILITIES

Admiral COMBS. Under our "Alteration and replacement of facilities" budget activity we have reduced the 1952 estimate to approximately 70 percent of the amount provided in 1951. Because of the fewer number of stations to be activated in 1952, the largest reduction has been made in the structural repairs program which finances the repair and rehabilitation of station facilities. The principal requirement under this budget activity in 1952 relates to ground electronic equipment, for which we have budgeted $30,000,000 to replace deteriorated and obsolete communications equipment essential for ground-to-air communications and to procure improved radar equipments required for the modernization of air navigation systems. We also have budgeted $13,000,000 to cover requirements for machine tools and shop equipment for our overhaul and repair facilities, primarily to equip them for handling the new jet aircraft models which are becoming increasingly important in our fleet complements.

Senator O'MAHONEY. The table shows a reduction of $23,448,000 below the 1951 program.

Admiral COMBS. Yes, sir.

Senator O'MAHONEY. How does it come about in "Alteration and replacement" you can make that saving? You have two additional stations.

Admiral COMBS. In 1951 we activated 10 stations. There are nonrecurring costs in the activation of those 10 stations. We propose only two stations in 1952.

Senator O'MAHONEY. The ground electronic equipment is reduced by $2,000,000. Does that mean that to reactivate two stations you will have to spend a substantial sum?

Admiral DUCKWORTH. No, sir. We have a program to replace the deteriorated and obsolete communications which we have been using at many of our stations for a long period of time. That is a phase item. The phase we are asking for in this appropriation covers many more than the two stations which we are activating this year.

MODERNIZATION OF ELECTRONIC EQUIPMENT

Senator O'MAHONEY. What is it going to cost to modernize with electronic equipment all of these naval stations if this is only a part of it?

Captain DODSON. That is a continuing program, sir. This $30,000,000 is the second increment of a major procurement program to shift our ground communications to higher frequencies so they can communicate with the higher-frequency equipment that is being installed in aircraft. It is a comparable program to one that is initiated in the airborne electronic equipment.

Senator O'MAHONEY. The thought running through my mind is this: Since you activated 10 new stations in 1951 and it cost you $32,000,000 to do that, I assume that it meant a very large expenditure in these 10 stations to put in modern electronic devices. Now you are taking two new stations and I would assume you would have to spend a considerable sum to equip those stations which have been inactive with modern electronic equipment. But this whole item is under the heading of "Alteration and replacement."

Captain DODSON. Out of the $32,000,000 for ground electronic equipment in 1951, about $8,000,000 of that was associated with the activation of the 10 stations that came into the program in 1951. In the 1952 program, of the $30,000,000 budgeted for ground electronics, about $2,000,000 is associated with the activation of these two additional stations. The rest are funds needed to modernize equipment at all of our existing stations.

Senator O'MAHONEY. The evidence at previous hearings would indicate for all the services electronics are very expensive, all these new devices, because they are very modern. There has been a great advance since World War II. So I am wondering whether this is merely an installment on a big bill, or whether it is the normal annual cost of repair and replacement.

Captain DODSON. I would estimate our normal annual repair and replacement cost in this ground electronics area is only around $12,000,000 to $15,000,000. A part of this $30,000,000 is another installment for a replacement program that has been underway for about 2 years.

CAPITAL INVESTMENT AND OBSOLESCENCE RATE

Senator O'MAHONEY. What is capital investment planned for the electronic installations and how much of it has already been expanded?

Senator FERGUSON. And what is its obsolescence rate?

Captain DODSON. The equipment that is being installed, the first increment of which was budgeted in 1951, will be operational as far as its obsolescence is concerned for perhaps 10 years, at least that long. Some of it will require replacement during that period of time due to its wearing out.

Senator FERGUSON. You feel you are reaching a period in this work that it is of a more permanent nature than it has been in the past?

Captain DODSON. That is correct, sir. That is because we are forced to shift to higher frequencies in this area in order to avoid interference with commercial broadcasting. That is a requirement that has been given to us by agencies outside the Department of Defense.

Admiral COMBS. The Federal Communications Commission required the armed services shift their frequencies to other bands, which in turn requires a considerable expenditure of funds.

Senator O'MAHONEY. Now you are talking merely of communications?

Admiral COMBS. Yes, sir; but there are many other phases of this program, such as navigational equipments to modernize our air navigation systems.

A summary of the 1951 and 1952 programs comprising this budget activity follows.

(The summary referred to is as follows:)

Program areas	1951 programs	1952 programs	Decrease from 1951
Structural repairs	$31,720,000	$16,150,000	$15,570,000
Landing aids	2,013,000	1,500,000	513,000
Shop equipment	18,365,000	13,000,000	5,365,000
Ground electronic equipment	32,000,000	30,000,000	2,000,000
Total	84,098,000	60,650,000	23,448,000

Research and development:	
1952 program	$159,729,000
1951 program	130,262,000
Increase	29,467,000

RESEARCH AND DEVELOPMENT FUNDS, NAVY

Admiral COMBS. Research and development funds are of utmost importance to our aeronautical capability and can hardly be overemphasized insofar as necessity to carry out the over-all program is concerned. It is axiomatic that technical preeminance is fundamental to superior air power and that only by progressively prosecuting our developmental programs can we retain our technical preeminence. Soundly supported and vigorously prosecuted research and development is our only assurance of technical superiority over our Communist protagonists and funds in this area are among our most serious needs.

To accomplish this objective, the 1952 program contemplates both a major acceleration of projects currently under way and a rapid prosecution of urgent new projects which were deferred in recent years because of financial limitations. The relative emphasis planned under our various research and development program areas is summarized in the following table:

(The information referred to is as follows:)

Program areas	1951 program	1952 program	Increase over 1951
Piloted aircraft	$39,243,047	$56,750,000	$17,506,953
Guided missiles	21,582,222	24,300,000	2,717,778
Power plants	17,400,400	17,800,000	399,600
Electronics	22,526,672	23,000,000	473,328
Supporting programs	29,509,659	37,879,000	8,369,341
Total, research and development	130,262,000	159,729,000	29,467,000

Admiral COMBS. Specifically, this estimate covers the initiation of several new prototype aircraft. This year we are planning to accelerate our prototype work by having several manufacturers prosecute similar prototype designs concurrently and in competition with one another. In addition, the program reflects the cost of intensified effort in the supporting equipments area, to provide for the improvement of fire-control systems, automatic turrets, all-weather instrumentation, high-altitude and survival equipment, launching and arresting gear, automatic navigational aids, portable ground-handling and servicing equipment, and aerological and photographic equipment.

INDUSTRIAL MOBILIZATION

1952 program, $6,221,000; 1951 program, $29,354,000; decrease, $23,133,000.

Most of our mobilization requirements are being met through the accelerated production necessary to meet current aircraft-delivery schedules and through the expansion in productive capacity covered by our aircraft-procurement estimates. Going production lines spread over a broad basis and supplemented by ready production capacity provides the best possible measure of mobilization insurance. There are, however, a number of additional mobilization measures which need to be accomplished under our industrial mobilization budget activity.

In 1952 major emphasis under our industrial mobilization budget activity will be directed toward the redesign of products, in order to make possible the use of substitute materials and to eliminate critical operations in production processes, and toward the development of high-volume production methods and machinery. These projects are budgeted at $6,221,000, a $23,000,000 decrease from 1951.

Senator O'MAHONEY. Is that carried on separately from aircraft from the United States Air Force industrial mobilization and the Department of Defense as a whole?

Admiral COMBS. No, sir. It is very closely integrated. The Air Force and the Navy with the Munitions Board work together.

Senator O'MAHONEY. This is merely an allocation to the Navy of the general expense?

Admiral COMBS. Yes, sir.

SUPPORTING EQUIPMENT, MATÉRIEL, AND SERVICES

1952 programs, $114,350,000; 1951 programs, $132,304,444; decrease, $17,954,000.

Requirements budgeted under the heading of "Supporting equipment, matériel and services" are geared to projected 1952 levels of aircraft deliveries, aviation training and aircraft operations and to the programed 1952 size of the operating fleet: The three largest requirements in this area, each of which represents an increase over the previous year's estimates, are directly related to greatly accelerated deliveries of new aircraft and associated aeronautical matériel. These are: inspection, photography, and synthetic training devices. The increased inspection requirements reflects the large expansion in aircraft deliveries. The other two involve procurement of specialized cameras necessary to equip photographic versions of fighter and attack aircraft and of synthetic training devices for the new aircraft models being delivered.

NEWS VERSUS MILITARY PHOTOGRAPHY

Senator O'MAHONEY. I think every Member of Congress takes note of the great number of bulbs that are wasted by news photographers taking pictures of scenes around the Capitol. How about the record of Navy photographers? Does all of this photography produce results?

Admiral COMBS. It does indeed, in that we keep the bulb photography to a minimum. That is one of our minor phases of photography. The phase that is most important to us is the procurement of the very high-speed cameras for photographic aircraft used for flying over enemy areas where we want to get information. These aircraft bring back photographs which give us valuable combat intelligence information which our marines are using right now in Korea. That is the main part of our photography and the most important part.

Senator O'MAHONEY. That is the most costly, too, I suppose.

Admiral COMBS. Yes, sir. The cameras which we have now and have had in World War II and which have proved so effective are not in phase now when we put them in the very much faster jet fighter planes. They are too slow. The plane must go fast and we have to buy new equipment that will operate in these new jet aircraft.

Senator O'MAHONEY. Military photography is essential. I can imagine, however, that a good deal of bulb consumption takes place around military installations for news purposes. Is anybody here able to tell us how much of that is really used by the newspapers of the country and the magazines?

Captain DODSON. I can give you a general answer, sir. We give a small allotment for local photographic purposes to each of our stations that amounts for 1 year to $1,000. In other words, each station spends on photography less than $1,000 a year. That has to cover the kind of photography of which you are speaking for public relations releases as well as all of their official photography that is used in the overhaul and repair processes, etc.

Senator O'MAHONEY. Do you attempt to keep it down to a minimum?

Captain DOBSON. Since we are supporting 79 stations, the total cost for that would be in the area of about $75,000 out of the total request you have before you, sir.

FILM TRAINING PROGRAM

Admiral COMBS. There is one other phase of photography which is important to us that I would like to mention. That is our training film program.

We make these training films to instruct the officers and enlisted men in the various phases of their duties. They are very good. They are of great help in attaining and maintaining operating proficiency of the individual.

Over-all, our total estmate for the supporting programs covered by this budget activity is lower than the corresponding 1951 estimate because of the completion of a number of nonrecurring projects budgeted in 1951, principally station activation projects and a major program for the evaluation of missile-guidance systems. A general summary of the major items covered by this budget activity follows:

(The summary referred to is as follows:)

Program area	1951 program	1952 program	Change from 1951
Inspection	$9,000,000	$15,000,000	+$6,000,000
Photography	7,687,000	27,345,000	+19,658,000
Synthetic training devices	13,983,000	23,180,000	+9,197,000
General station equipment	28,737,000	15,000,000	−13,737,000
Service evaluation	30,491,000	6,049,000	−24,442,000
Others, including technical antisubmarine matériel, aerology, flight clothing, catapults, and arresting and barrier gear	42,406,000	27,776,000	−14,630,000
Total, all program areas	132,304,000	114,350,000	−17,954,000

DEPARTMENTAL ADMINISTRATION

Admiral COMBS. 1952 program, $5,891,000; 1951 program, $5,305,000; increase, $586,000.

We have not budgeted for any increase in departmental personnel in 1952 over the current employment level but we are asking for the funds necessary to maintain the current employment level. Last year, you may recall, you appropriated funds for an increase in the civilian staff of the Bureau. Since then the administrative workload of the Bureau has continued to increase with the expansion of naval aviation training and operations, the accompanying expansion of the shore establishment, and great acceleration in research and development and procurement programs. We are finding it increasingly difficult to handle this larger workload with our present staff and now that the controlled materials plan is coming into operation we are confronted with still further problems. We are, however, endeavoring to do as much as is possible with the staff presently provided.

Senator O'MAHONEY. How many persons are involved?

Captain DOBSON. In our department we have 1,643 currently on board. That is the budgeted figure for 1952.

Senator O'MAHONEY. That is all naval aviation?

Captain DOBSON. That is departmental personnel in the Bureau of Aeronautics.

Senator O'MAHONEY. Do you have any distinction in mind when you answered my question from what I said?

Captain DODSON. That 1,643, sir, is the total number of civilian personnel paid for out of this appropriation, departmental administration, and also includes 492 personnel charged to the construction of aircraft appropriation.

Senator O'MAHONEY. Then am I to infer there are additional civilian personnel in naval aviation?

Captain DODSON. Yes, sir. There are field personnel.

Senator O'MAHONEY. But not in the departmental administrative staff?

Captin DODSON. No, sir.

Senator O'MAHONEY. That is the distinction you made?

Captain DODSON. That is correct, sir.

AIRCRAFT PROCUREMENT

Admiral COMBS. 1952 program, aircraft procurement, $2,983,412,000; facilities expansion, $466,442,000. 1951 program, aircraft procurement, $2,330,612,000; facilities expansion, $448,822,000. Increase, aircraft procurement, $652,800,000; facilities expansion, $17,620,000.

Aircraft procurement is the most important as well as the largest segment of the Navy's aviation budget. The size of the procurement program determines the effective strength of naval aviation, by providing replacement aircraft of superior combat potentialities, and at the same time governs the mobilization potential of the aircraft industry, by maintaining in being an organized nucleus of productive capacity. The 1952 program we propose is intended to accomplish two major objectives: First, modernization at the earliest practicable date of all Regular operating forces plus those Reserve forces scheduled for early deployment upon mobilization; and secondly, a sound expansion of going aircraft production.

The 1952 estimate for aircraft procurement is based primarily on a projection of the approved aircraft operating strength for the Regular Navy and Marine Corps and their Reserve components through December 1953. This projection is necessary because of production lead-time involved in the manufacture of modern aircraft. The aircraft procurement is required to modernize these approved forces, but our estimate thus falls short of modernizing approved forces by some 1,203 combat aircraft.

Senator O'MAHONEY. Are these aircraft you are purchasing for naval aviation different in any substantial degree from the aircraft being purchased generally?

Admiral COMBS. In many respects they are, particularly our carrier-type aircraft, our fighters and attack planes in which we have the arresting gear and the catapult equipment only.

The transport types, the helicopter types and the training types are common to all services. We have patrol types which are peculiar to naval aviation in that they have very high powered radar equipment for antisubmarine warfare.

Senator O'MAHONEY. Does the construction of these distinctive craft require different facilities?

Admiral COMBS. They require additional facilities.

Senator O'MAHONEY. No, I mean different facilities for construction. You have a big item, $466 million for facilities expansion. Are those facilities which are to be expanded manufacturing facilities?

Admiral COMBS. Yes, sir.

Senator O'MAHONEY. Are they different in any essential from the facilities used for the manufacture of ordinary aircraft?

Admiral COMBS. No, sir, only in the types of tooling that are required and for the much heavier type of material used in our modern combat aircraft and for the specialized jigs and fixtures that have to be procured for a particular model of aircraft.

EXPANSION OF FACILITIES

Senator O'MAHONEY. You received $448,822,000 in 1951 for the expansion of facilities.

You are asking something more than that this year. What is the present state of the expansion of the facilities required to maintain the level of production which will be anticipated?

Admiral COMBS. I would like at this time to ask Captain Reynolds to start his presentation again because his presentation will answer many of your questions relating to facilities.

Senator O'MAHONEY. Before Captain Reynolds begins, my basic question is to what extent do we now have the facilities which are required to maintain the production line that you feel is necessary for naval aviation?

Admiral COMBS. We have obligated the majority of the funds available to us for facilities in 1951 to provide our various manufacturers with the necessary facilities and tools to broaden the base to the point where Captain Reynolds has showed you we must go to increase our aircraft production rate.

Senator O'MAHONEY. When will we have those facilities? You did not have them at the end of 1951. The obligations you made with 1951 funds were not sufficient; otherwise, you would not be asking this amount. If this amount for $466 million is allowed, will that give you the production base?

Captain REYNOLDS. To answer your question, this curve of capacity to produce is the curve which we started on in 1951 which we are now going up with the funds now available to us. That curve also continues on to the required facilities and tool point on the chart and is continued there with the funds which we are asking for this year. That brings the curve of capacity to produce to the level which we want to maintain. The expenditure through 1952 brings the tooled capacity to the level required and the cost is not reoccurring or continuing.

Senator O'MAHONEY. Your diagram there shows fiscal 1951, 1952 and 1953?

Captain REYNOLDS. This is a calendar year. Therefore 1951 fiscal, 1952 and 1953 are shown by the midpoints.

Senator O'MAHONEY. That means before the end of fiscal 1952 with this money asked here you will have reached approximately your capacity levels?

Captain REYNOLDS. We will reach the capacity level of what we want to procure in the tools for that capacity and the facilities for that capacity.

Senator O'MAHONEY. Will that be altogether distinct from other capacity that may be built for the Air Force?

Admiral COMBS. Yes, sir. That is for the Navy.

Senator O'MAHONEY. This is for the Navy and the Navy alone?

Admiral COMBS. Yes, sir.

Senator O'MAHONEY. Will it be expended in the facilities of companies that are engaged in producing aircraft for the Air Force?

Admiral COMBS. It will be partly for the companies that are now producing and partly for other companies that do not now produce aircraft, such as the automobile companies. They in turn will use part of that money to prepare small business down the line, subcontractors, to gear themselves up to greater capacity.

Senator O'MAHONEY. Would you say we are providing different facilities to produce Navy planes from the facilities that produce the planes for the Air Force?

Admiral COMBS. Yes, sir; but it is a fully coordinated program, with the Air Force and Navy each doing their part to eliminate duplication.

Admiral CLEXTON. Mr. Chairman, I believe you made a statement we would have the facilities by the end of 1952. This is fiscal year 1952 here [indicating on chart]. So the statement should read, "Near the end of fiscal year 1953 we will have the facilities."

Senator O'MAHONEY. Yes.

So this appropriation is not sufficient to build facilities you need, to expand the facilities you need for this program?

FUNDS SUFFICIENT FOR PROGRAMS

Captain REYNOLDS. This money, if appropriated, will provide the facilities. They will not be ready in place in 1952 because of the lead time and the time to get the facilities into being. But this is the money to provide for that.

Senator O'MAHONEY. I misunderstood Admiral Clexton.

Admiral CLEXTON. I had the impression you thought the facilities would be ready by the end of fiscal 1952.

Senator O'MAHONEY. No. I meant the $466 million which you are asking here, if appropriated, will carry you through to that point in fiscal 1953.

Captain REYNOLDS. That is correct. We started out with a production level of approximately 100 airplanes per month. That capacity was built on the capability of largely hand work and machine work which was not done on production tools.

In 1951 we began to buy production tools so that we could get the aircraft produced on a high-production level rather than by the "hand" procedure.

We established a program which would make "production capacity" available by buying the tools peculiar to aviation and by getting the facilities up. In order to get that production capacity, which is a long-range program, under way the tools had to be placed on order. We had to get the facilities into the building stage. That program was projected on up this line on the chart.

Senator O'MAHONEY. Thank you, Captain. Please proceed, Admiral.

PROCUREMENT PROGRAM DEFERRED PENDING PROGRAM EVALUATION

Admiral COMBS. We believe, however, that any decision on the procurement of additional aircraft should be deferred until combat and production experience under existing programs can be more adequately evaluated. During this period of evaluation we plan to meet the aircraft deficiency by operating obsolescent models of limited military usefulness. This expedient defers to a later date the necessity of meeting procurement requirements and represents a calculated risk we are taking in an effort to insure that the aircraft which ultimately are ordered to modernize our forces will represent the most modern and the most effective types available.

As has been explained previously, the defense estimates for 1952 are predicated on a careful balance between limited effective forces-in-being and a mobilization potential which will serve as a well conceived base of departure. The full significance of this principle is exemplified by the problems of the aviation industry. During the past year the aviation industry was able to provide only a modest acceleration in deliveries despite the very great pressure which existed for rapid acceleration. The first step to overcome this serious condition was taken some months ago when funds were provided to finance long lead-time facilities required by the planned 1952 procurement program.

The Navy's program of limited forces-in-being, forces which are only partially modernized, is dependent upon an adequate industrial base capable of promptly producing aeronautical matériel in the event of mobilization. Once full mobilization becomes necessary, we should immediately make up all deficiencies in our combatant units and should produce as rapidly as possible the aircraft needed to expand our fighting forces. Current mobilization plans require delivery rates greatly in excess of scheduled delivery rates under present procurement. The estimates before you contemplate a $466.4 million program to augment existing plant facilities of airframe and component manufacturers as an increment toward broadening the productive base in preparation for such an eventuality.

ORDNANCE FOR NEW AIRCRAFT

1952 program, $49,056,000; 1951 program, $57,741,000. Decrease, $8,685,000.

Our ordnance for new aircraft budget activity finances the procurement by the Bureau of Ordnance of guns and fire-control equipment, including spares and spare parts, to be installed in aircraft procured under the aircraft procurement budget activity of the construction of aircraft and related procurement estimate. Aviation ordnance equipment under the technical cognizance of the Bureau of Aeronautics is included with all other component equipment under the aircraft procurement budget activity. The ordnance requirements covered by this $49 million estimate are determined entirely by the particular models and numbers of aircraft to be procured under that activity of the budget.

GUIDED MISSILE AND TARGET DRONE PROCUREMENT

1952 program, $33,425,000; 1951 program $101,261,000; decrease, $67,836,000.

Our most urgent guided-missile requirement was covered in the supplemental estimate you approved last spring. That supplemental provided both for the procurement of air-to-air missiles, of the type selected by the Joint Chiefs of Staff for a major production program, and for the basic production facilities and long lead-time tooling required to produce missiles of this type at an accelerated rate. Deliveries from this procurement will be used for fleet evaluation in fiscal year 1953. Meanwhile, we are increasing our efforts in other missile areas and under our 1952 estimate will accelerate flight test and tactical evaluation of a number of promising missiles just emerging from our laboratories.

We feel that the significant progress that has been made in the guided-missile field during the past several years, particularly with reference to guidance systems and propulsion units, warrants our continued effort to provide the fleet with operational missiles at the earliest practical date. The 1952 estimate of $16.5 million for guided-missile procurement will permit acceleration of the flight-test and tactical evaluation program of these missiles.

Target drones, which are used by the fleet for gunnery training, have been budgeted at an increased level in 1952 in keeping with an intensified fleet-training program. Specifically, the 1952 estimate provides for the procurement of targets in the 200- and 400-knot class at a total cost of $16.9 million. Procurement at this level has been directed by the Chief of Naval Operations and is considered the minimum necessary to support fleet operations.

TECHNICAL EQUIPMENT FOR SERVICE TRAINING

1952 program, $10,938,000; 1951 program, $4,735,000; increase, $6,203,000.

With the rapidly increasing complexity of our airborne equipment we have found it a matter of vital necessity to thoroughly train the personnel responsible for the maintenance or operation of this equipment. Experience with untrained personnel in recent years has clearly shown that on-the-job training is no longer adequate to convey the technical knowledge necessary to enable fleet personnel to maintain and operate the advanced-type equipment now in service use. Lack of adequate training, however, frequently results in damage to expensive equipment and even jeopardizes safety of flight itself. For these reasons the urgent need for adequate technical training is forcibly brought to our attention each passing day.

Procurement of radar-operated gun-laying turrets, jet engines, and advanced electronic equipment for classroom instruction has been programed at an increased level in 1952. Insofar as possible we try to meet a great many of our training requirements with equipment from attrited aircraft or from maintenance stocks. In 1952 original introduction of advanced equipment into the aircraft being procured in that year makes necessary the furnishing of similar equipment to the Training Command concurrently, so that trained technicians

will be available for the maintenance and operation of these equipments in the fleet squadrons prior to the time fleet squadrons actually are equipped with these advanced models.

The 1952 estimate for the first time provides for the procurement of guided-missile components to be utilized in training technicians in missile operation. In line with our practice of making funds available in priority areas, approximately one-third of our 1952 estimate for technical training equipment will be allocated for this purpose.

AIRCRAFT MODERNIZATION

1952 program, $29,203,000; 1951 program, $107,751,000; decrease, $78,548,000.

During the past year we financed a major program of modernizing service aircraft by reconfiguring them for antisubmarine missions. The equipment for this program currently is on contract and the program itself will be completed by the end of 1952. Since this major program already is financed, the new requirements which must be covered by the 1952 estimate can be met with a lower appropriation for this area than was made in 1951. These 1952 requirements consist principally of navigational aids and newly developed antisubmarine equipment which will be installed in combat aircraft now operating in our fleet complements.

Approximately half of the 1952 fund requirements are to provide the initial procurement for carrier-type aircraft of a newly developed navigational aid recently adopted for fleet use. In addition funds will be needed to procure omnirange equipment for the back fitting of service aircraft to enable the Navy to use the national airways system, to equip service aircraft with new electronic items so as to enable them to operate with the aircraft coming off the production line, and to provide transports with the radars necessary for safe operation in areas which do not have the usual ground navigational aids.

GENERAL SUMMARY

In this statement I have covered the high lights of our naval aviation plans for fiscal year 1952 and the funds required to carry out these plans. Over-all the request for new program authority for naval aviation in 1952 totals $4,497,869,000, of which $3,572,476,000 is for new aircraft and related procurement and $925,393,000 is for operating programs, industrial mobilization and research and development. There is, however, an additional $450 million requested to finance prior contract authorization for aircraft procurement.

LANGUAGE AMENDMENT REQUESTED

No change is proposed in the basic appropriation language but authority is requested to extend the expenditure availability of unexpended balances under the appropriation "Aviation, Navy, 1949." This extension relates primarily to research and development contracts and a small number of contracts covering the procurement of electronic equipment which is unavoidably behind schedule. The extension requested does not involve any new appropriation. It merely

serves to continue available for one additional year the appropriation already made for this purpose and similar extensions have been authorized for a number of years to eliminate the undue administrative burden which would be involved if invoices under these active contracts had to be handled as claims.

If there are any specific questions relative to the budget request now under consideration or to any other aspect of our programs, I shall be happy to answer your queries and to discuss further any phase of our estimates which you may desire to consider at greater length.

Senator O'MAHONEY. Admiral Clexton, do you have a copy of the bill and the justification before you?

Admiral CLEXTON. Yes, sir.

Senator O'MAHONEY. Please look at page 316.

Admiral CLEXTON. Yes, sir.

COMPARABLE FIGURE FOR 1950–52

Senator O'MAHONEY. Then the next page will be 331. This print, of course, shows the appropriation for 1951. What is the figure that would go in page 316? Last year it was $532,226,000.

Admiral CLEXTON. That was 1950; was it not?

Captain DODSON. That figure is 1950.

Senator O'MAHONEY. In 1951 it was $932,000,000.

Captain DODSON. The comparable figure for 1951 was $932,387,679. The figure that would go in for 1952 would be $925,393,000.

Senator O'MAHONEY. As shown on appendix A?

Captain DODSON. That is correct. That is $6.9 million lower than in 1951.

Senator O'MAHONEY. What is your judgment as to the amount of the unexpended balance for which provision is made here?

Captain DODSON. That amounts to about $6,500,000.

Senator O'MAHONEY. Is that all you have left now?

Captain DODSON. That is the extension we are asking for, the unexpended balance in 1949.

Senator O'MAHONEY. Is that both unobligated and unexpended?

Captain DODSON. It is obligated but unexpended, sir.

Senator O'MAHONEY. So there is no unobligated money?

Captain DODSON. No, sir; there are no unobligated balances in this appropriation.

REQUEST FOR NEW LANGUAGE

Senator O'MAHONEY. On page 331 there is new language suggested. It appears in the italics, "including land necessary therefor without regard to section 3734."

What have you to say about that new language? Does that mean the purchase of land for the facilities or for naval stations?

Captain DODSON. That is in connection with the construction of aircraft program, the facilities program as explained to you by Captain Reynolds. It is land in connection with the facility expansion for the production of aircraft.

Senator O'MAHONEY. This italicized language is you are asking authorization to purchase land?

Admiral CLEXTON. That is right.

Captain DODSON. That is correct, sir.

Senator O'MAHONEY. What amount of money is expected in the budget for the purchase of land? We have not had any description of that as yet.

FUNDS FOR LAND ACQUISITION

Captain DODSON. Included in the $466,000,000 requested for facilities is a total for land of about $10,500,000.

Senator O'MAHONEY. How do you figure that?

Captain DODSON. That includes land and buildings, sir.

Senator O'MAHONEY. $10,500,000?

Captain DODSON. Yes, sir.

Senator O'MAHONEY. Does that mean you are planning to build Government-owned structures on private land?

Captain REYNOLDS. That amount of money is for building Government building on Government-owned land.

Senator O'MAHONEY. Government buildings to be operated by whom?

Captain REYNOLDS. By contractors.

Senator O'MAHONEY. For the construction of airplanes?

Captain REYNOLDS. Yes, sir; airplanes and related parts.

Senator O'MAHONEY. So these will be Government-owned buildings?

Captain REYNOLDS. Yes, sir.

Senator O'MAHONEY. There is no limitation here upon the amount. Would there be any objection to inserting in this language "including not to exceed $ ——— for the purchase of land necessary therefor"?

Captain DODSON. There would be no objection to that. The limitation would be about $10 million. It would not hinder us in any way, sir.

Senator O'MAHONEY. How did you reach this estimate of $10 million for the purchase of land?

Admiral COMBS. By the breakdown in our plans for the different companies and what we want to do in the way of the manufacture of aircraft and facilities at each one of these individual places.

Senator O'MAHONEY. Would this be scrambled facilities such as we had in World War II?

Admiral COMBS. No, sir.

Senator O'MAHONEY. I get the impression you would be buying for the Government land adjacent to a presently existing privately owned plant.

Admiral COMBS. That is correct, sir. It would be adjacent to but not entirely surrounded by the privately owned land, a problem we faced after the last war.

Senator O'MAHONEY. You would find that more economical than having the company itself build its own facilities?

Admiral COMBS. We believe so because our plan is to play those commercial plants like an accordion. Take one end of a plant; as the civilian production drops off, the defense production starts in. At the end out here we would have a plant of our own into which, in peacetime, as the civilian production expanded to the end of the building, we would move our tools out and preserve them in a facility of our own where they are stored for the next emergency.

Senator O'MAHONEY. What section is that?

Admiral CLEXTON. That is where you have to go through a complete check of the title of the land. In all the areas where requests have been made to speed up the construction, that title-search language has been taken out. That is what is required in section 355, Revised Statutes.

Senator O'MAHONEY. You take a chance on the title?

Admiral CLEXTON. The payments are not made until the title search is completed but you can start it.

Senator KNOWLAND. It is what you call a calculated risk.

Admiral CLEXTON. Yes, sir.

Senator O'MAHONEY. This section is in 40 United States Code, section 267, restrictions on buildings, approval of sketch plans, changes, limit on costs: no money to be expended on public building until plans showing design, cost, and so forth, made by supervising architect, Treasury Department, and approved by the Secretary of the Treasury, and no changes made involving an expense in excess of the limit of cost fixed by Congress and all appropriations made for construction to be expended within limit of costs so fixed.

That is the meaning of that section.

What would be your program now, Admiral?

Admiral CLEXTON. The next appropriation would be "Ships and facilities" and the shipbuilding program. "Ships and facilities" has $1.6 billion and the "Shipbuilding and conversion program" is about $1.3 billion.

Senator O'MAHONEY. Very well. We will proceed with that tomorrow morning at 10 o'clock.

(Whereupon at 12:30, Wednesday, July 11, 1951, the hearing was recessed, to reconvene at 10 a. m. Thursday, July 12, 1951.)